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Ser. No. 10/501,621

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. (Previously Presented) Method for light modulation, whereby intensity of the light is modified by means of electrically chargeable or charged particles, wherein a gas or vacuum is provided in which said particles are movable, a granular gas is produced with said gas or vacuum between at least two electrodes such that due to a temporally varied voltage applied to one of said electrodes said electrically charged particles present in an electrical field between said electrodes are moved back and forth, and the light for modulation is conducted through said granular gas between said electrodes.

2. (Previously Presented) Method in accordance with claim 1, wherein said light modulation is performed by changing said voltage applied to said electrodes between a lower limit of voltage at which said particles are largely not moved or adhere in the area of one of said electrodes and an upper limit of voltage up to which said granular gas can be produced.

3. (Previously Presented) Method in accordance with claim 1 or 2, wherein said light modulation is performed depending on the frequency and/or amplitude of

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said voltage applied to said electrodes.

4. (Currently Amended) Method for light modulation, whereby intensity of the light is modified by means of electrically chargeable or charged particles, wherein a gas or vacuum is provided in which said particles are movable, a granular gas is produced with said gas or vacuum between at least two control electrodes such that due to a temporally varied voltage applied to one of said control electrodes said electrically charged particles present in an electrical field between said control electrodes are moved back and forth, the light for modulation is conducted through said granular gas between said control electrodes. ~~Method in accordance with claim 1 or 2, said control electrodes provide an area for forming said granular gas, limiting electrodes are provided wherein, by means of additional limiting electrodes which limit said area for forming said granular gas from an exterior, an area provided by means of control electrodes for forming said granular gas is limited to the exterior, whereby a voltage is applied to said limiting electrodes and/or by means of said limiting electrodes an electrical field completely surrounding said granular gas is produced such that said electrically charged particles and/or said granular gas are kept in an area between said control electrodes.~~

5. (Currently Amended) Method in accordance with ~~claim 1~~ claim 1 or 2, wherein by means of a predetermined number of control electrodes, parts of said

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light beam entering into areas allocated to said control electrodes are modulated independent of one another.

6. (Currently Amended) Apparatus for light modulation, containing electrically chargeable or charged particles that are movable between at least two electrodes by means of which the intensity of the entering light can be modified, wherein provided is a modulation cell that is closed air-tight or vacuum-tight to the exterior and in which a gas or vacuum is present at least between said two electrodes, and a distance between said electrodes is provided such that by applying [[a]] a temporally varied voltage in an electrical field between said electrodes a granular gas is present made of the electrically charged particles and the gas or vacuum and the light to be modulated travels into an area between said two electrodes.

7. (Previously Presented) Apparatus in accordance with claim 6, wherein at least one of said electrodes has an insulating layer on a side thereof facing said other electrode.

8. (Currently Amended) Apparatus for light modulation, containing electrically chargeable or charged particles that are movable between at least two control electrodes by means of which the intensity of entering light can be modified, wherein provided is a modulation cell that is closed air-tight or vacuum-tight to an

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exterior and in which a gas or vacuum is present at least between said two control electrodes, and a distance between said control electrodes is provided such that by applying a temporally varied voltage in an electrical field between said control electrodes a granular gas is present made of the electrically charged particles and the gas or vacuum and the light to be modulated travels into an area between said two control electrodes. Apparatus in accordance with claim 6 or 7, wherein arranged at a predetermined distance laterally to said control electrodes between which said granular gas can form are limiting electrodes to which a voltage is applicable such that said particles and/or said granular gas is kept in the modulation cell formed by means of said control electrodes.

9. (Previously Presented) Apparatus in accordance with claim 6 or 7, wherein a predetermined number of control electrodes that can be actuated with voltage independently of one another are provided.

10. (Currently Amended) Apparatus for light modulation, containing electrically chargeable or charged particles that are movable between at least two control electrodes by means of which the intensity of the entering light can be modified, wherein provided is a modulation cell that is closed air-tight or vacuum-tight to an exterior and in which a gas or vacuum is present at least between said two control electrodes, and a distance between said control electrodes is provided such

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that by applying a temporally varied voltage in an electrical field between said control electrodes a granular gas is present made of the electrically charged particles and the gas or vacuum and the light to be modulated travels into an area between said two control electrodes. Apparatus in accordance with claim 6 or 7, wherein limiting electrodes are arranged at a predetermined angle to said control electrodes and/or said limiting electrodes laterally limit an area of the granular gas and/or said limiting electrodes are light-permeable.

11. (Currently Amended) Apparatus in accordance with ~~claim 10~~ claim 10, wherein at least one of said control electrodes is coated with an electrically insulating layer on ~~the~~ a side facing the area of said granular gas.

12. (Cancelled).

13. (Previously Presented) Apparatus in accordance with claim 7, wherein each of said electrodes has an insulating layer on a side thereof facing the other electrode.

14. (Previously Presented) Apparatus in accordance with claim 9, wherein opposing said control electrodes is a single common control electrode.

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15. (Previously Presented) Apparatus in accordance with claim 11, wherein each of said control electrodes is coated with an electrically insulating layer on the side facing the area of said granular gas.

16. (New) Method in accordance with claim 4, wherein said light modulation is performed by changing said voltage applied to said control electrodes between a lower limit of voltage at which said particles are largely not moved or adhere in the area of one of said control electrodes and an upper limit of voltage up to which said granular gas can be produced.

17. (New) Apparatus in accordance with claim 8, wherein at least one of said control electrodes has an insulating layer on a side thereof facing said other control electrode.

18. (New) Apparatus in accordance with claim 10, wherein at least one of said control electrodes has an insulating layer on a side thereof facing said other control electrode.

19. (New) The method according to claim 1, wherein said light is illuminated into said granular gas with one intensity and said light exits said granular gas with a different intensity.

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20. (New) The method according to claim 1, wherein said light is illuminated into said granular gas with one intensity and said light exits said granular gas with a lower intensity.

21. (New) The method according to claim 1, wherein said light is illuminated into said granular gas in a direction parallel to surfaces of said electrodes which face said granular gas.

22. (New) The method according to claim 1, wherein at least some of said electrodes face each other and are separated by a distance of 0.1 mm to 1 mm.

23. (New) The apparatus according to claim 6, wherein at least some of said electrodes face each other and are separated by a distance of 1 mm to 0.1 mm.

24. (New) The method according to claim 1, wherein said voltage is between 50 V and 1000 V.

25. (New) The method according to claim 1, wherein said voltage is applied after said chargeable particles have been charged.

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26. (New) The method according to claim 1, further comprising charging powder with a charging electrode and insulating said charging electrode from a voltage source after said powder has been charged.

27. (New) The apparatus according to claim 6, further comprising a charging electrode for charging powder.

28. (New) The method according to claim 1, wherein said light is modulated during the application of said temporally varied voltage.